No. 802,247. PATENTED OCT. 17, 1905.

C. E. TRAXEL.

PRICKING PUNCH.

APPLICATION FILED MAR. 22, 1905.

Fig. 1

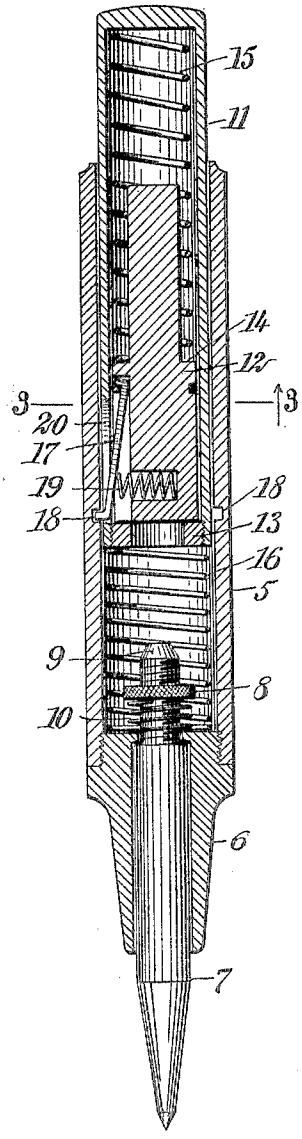


Fig. 2

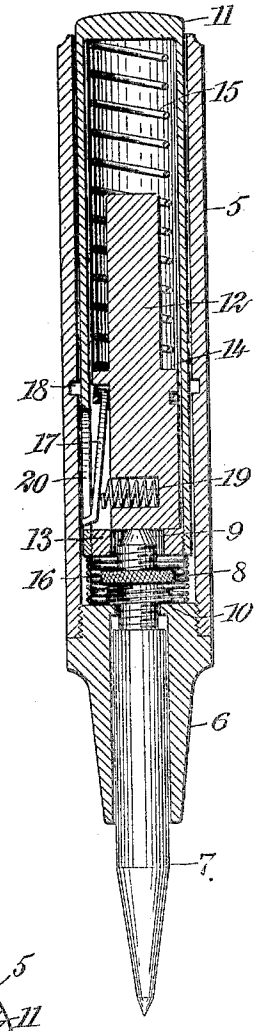
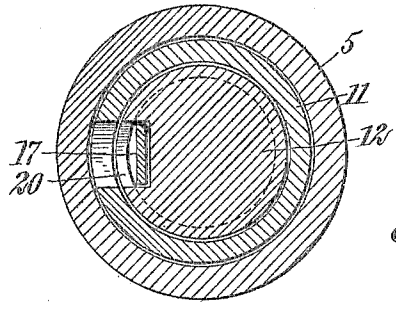


Fig. 3



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PRICKING-PUNCH.

No. 802,247. Specification of Letters Patent. Patented Oct. 17, 1905.

Application filed March 22, 1905. Serial No. 251,400.

To all whom it may concern:

Be it known that I, CHARLES E. TRAXEL, a citizen of the United States, and a resident of Rome, in the county of Oneida and State of New York, have invented a new and Improved Pricking-Punch, of which the following is a full, clear, and exact description.

This invention relates to improvements in tools for pricking metal for the starting of drills or the like, the object being to provide a tool of this character that will be practically automatic in its operation.

I will describe a pricking-punch embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal section of a pricking-punch embodying my invention. Fig. 2 is a similar section, but showing the punch in pricking position; and Fig. 3 is a section on the line 3 3 of Fig. 1.

The tool comprises a tubular handle or casing 5, having a detachable tubular extension 6, in which the punch 7 is movable. Between the inner end of the extension 6 and the nut 8 on the reduced stem portion 9 of the punch is a spring 10, designed to move the punch inward, and the tension of the spring may be regulated by the nut 8. Movable in the casing 5 is an interior casing 11, in which the striker or plunger 12 is arranged. In the lower end of the interior casing 11 is a ring 13, and arranged between a shoulder 14 on the plunger and the upper end of the casing 11 is a coiled spring 15, designed to force the plunger against the punch, as will be hereinafter described. The interior casing 11 when released is returned to normal position by means of a coiled spring 16, arranged between the inner end of the projection 6 and the inner end of the interior casing. Mounted to swing on the plunger 12 is a dog 17, the lower end of which is turned outward to engage in an annular channel 18, formed in the interior of the casing 5. This dog 17 is pressed outward by means of a spring 19, and its lower end for engaging in the channel 18 passes through a slot 20 in the casing 11.

In the operation when the casing 11 is forced downward the plunger 12 will be held stationary until the upper wall of the slot 20 engages with the dog, forcing its end out of the channel 18. Then the spring 15 having been compressed by the inward or downward movement of the casing 11 will expand and force the plunger against the punch 7. Upon releasing the casing 11 the spring 16 will return the inner casing 11 and the plunger to normal position.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a punch, a casing, a punch having lengthwise movement in the casing, a plunger, an actuating-spring for the plunger, means for holding the plunger stationary during compression movement of the spring, and means for releasing the plunger after the spring compression.

2. A pricking-punch comprising a casing, an interior casing movable in the first-named casing, a plunger in the interior casing, a spring for moving said plunger in one direction, means for locking the plunger in engagement with the first-named casing, and a punch adapted to be struck by the plunger.

3. In a pricking-punch, a casing having an interior channel, an interior casing, a plunger arranged in the interior casing, a dog mounted to swing on said plunger and having a portion for engaging in said channel, a spring for pressing the dog outward, a spring arranged between the plunger and the end of the interior casing, and a punch adapted to receive the impact of the plunger.

4. In a pricking-punch, a casing, a tubular extension on said casing, a punch movable in said extension, a spring for moving said punch in one direction, an interior casing, a spring-actuated plunger in said interior casing, and a spring for moving the interior casing and plunger to normal position.

5. In a pricking-punch, a casing having an interior channel, a tubular extension removably connected to said casing, a punch movable in said extension, a spring for moving the punch in one direction, an interior casing having a slot through its wall, a spring-pressed plunger in the interior casing, a dog having swinging connection with the plunger and adapted to pass through said slot to engage in said channel, and a spring for moving the interior casing and the plunger to normal position.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES E. TRAXEL.

Witnesses:

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